green mobility strategy for Nova Scotia
This report is dedicated to the approximately 30 percent of Nova Scotians who do not drive or who rely on alternative means of transportation.
About us

The Ecology Action Centre (EAC) has acted as a voice for Nova Scotia’s environment for over 35 years. The EAC’s mission is to encourage a society, which respects and protects Nova Scotia’s environment and provides economically sustainable livelihoods. Since 1971, the EAC has been working to build a healthier and more sustainable Nova Scotia. The EAC’s earliest projects included recycling and composting, now commonly practiced activities. Today the EAC has over 1400 members, 250 volunteers, 30 staff and 7 active committees. Our current areas of focus include transportation, built environment, marine, coastal, wilderness, food and energy issues.

Authors

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Executive Summary

Transportation, moving people and goods, is essential for our economic and social well-being. Currently, the majority of Nova Scotia’s citizens use a private automobile as their main mode of transportation. But our dependence on the private automobile is no longer socially, economically or environmentally sustainable.

Climate change poses a serious threat to our economy, our livelihoods, our ecosystems and our health. The transportation sector, including passenger and freight movement, accounts for 27 percent of Nova Scotia’s greenhouse gas emissions. Gas prices are the highest they have ever been in Atlantic Canada, and are predicted to continue rising. High gas prices are hurting individuals, auto manufacturers and trucking companies. Lack of transportation is increasingly a barrier to achieving employment and to accessing education, health care and social opportunities. Our dependence on the private automobile for transportation contributes to increasing rates of physical inactivity and chronic disease.

Transportation for sustainable prosperity must focus on reducing greenhouse gas emissions and air pollution, minimizing land use and improving citizen health, safety and access to amenities and services. A transportation strategy for Nova Scotia requires regional, urban, and rural solutions, including better land-use planning, more sustainable transportation options and vehicle efficiency. The purpose of the Green Mobility Strategy is to facilitate increased provincial investment in sustainable passenger transportation for Nova Scotia. The Ecology Action Centre recognizes that a sustainable freight transportation strategy is also required in Nova Scotia, but that is outside the scope of this document.

There are eight key recommendations in the Green Mobility Strategy. Each recommendation is accompanied by a series of suggested action steps. The process used to develop and prioritize the recommendations in the Green Mobility Strategy involved extensive research, convening and gathering input from a citizen advisory com-
Sustainable transportation...

- allows the basic access needs of individuals and societies to be met safely, in a manner consistent with human and ecosystem health, and with equity within and between generations;
- is affordable, operates efficiently and offers choice of transport mode;
- supports vibrant local, regional and national economies;
- identifies and accounts for the full costs of transportation systems in an equitable manner;
- limits emissions and waste to levels within the planet’s ability to absorb them;
- uses renewable resources at or below their rates of generation and uses non-renewable resources at or below the rates of development of renewable substitutes;
- reuses and recycles its components; and
- maintains the integrity of ecosystems and minimizes land use and noise.¹

Recommendations

1. Create an annual, predictable source of sustainable transportation funding

One approach to determining an appropriate level of provincial investment in sustainable transportation is to calculate the average amount invested by other provinces and apply this formula to Nova Scotia. To ascertain an appropriate level, all investments in sustainable transportation - transit, car pooling, rail, active transportation - should be considered. Canadian Urban Transit Association tracks provincial investment in public transit.

Currently, funding for transit by the province of Nova Scotia is significantly lower than that of other provinces. This comparison does not include municipal contributions. In 2008, funding from the Nova Scotia government for transit and community-based transportation, such as dial-a-ride, was $3.79 per capita.⁶ The average investment of Saskatchewan and Manitoba, the two provinces with populations closest in size to Nova Scotia’s, between 2003 and 2006 was $10.95 per capita; the average investment of all provinces, excluding Nova Scotia, during the same period was $19.87 per capita (Table 1).

There is a lack of data readily available on provincial investment in other sustainable transportation modes, such as active transportation. Therefore, for the purpose of establishing an estimate, The Ecology Action Centre recommends that Nova Scotia’s government use the provincial average for transit investment in Canada as a guide to determine the total...
Only 16% of children and youth in Nova Scotia walk or bike to school. 3

TABLE 1: Provincial transit investment

<table>
<thead>
<tr>
<th>Year</th>
<th>Area</th>
<th>Per Capita</th>
<th>NS Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Nova Scotia</td>
<td>$1.38</td>
<td>$1,290,000</td>
</tr>
<tr>
<td>2008</td>
<td>Nova Scotia</td>
<td>$3.79</td>
<td>$3,550,000</td>
</tr>
<tr>
<td>2003-06</td>
<td>Saskatchewan and Manitoba</td>
<td>$10.95</td>
<td>$10,240,000</td>
</tr>
<tr>
<td>2003-06</td>
<td>All Provinces, excluding Nova Scotia</td>
<td>$19.87</td>
<td>$18,580,000</td>
</tr>
</tbody>
</table>

sustainable transportation investment needed in Nova Scotia.

Based on the average per capita spending of other provinces, an annual investment of $11 million to $19 million in sustainable transportation would be appropriate in Nova Scotia. More investment may be needed to achieve greenhouse gas emission (GHG) reductions in the transportation sector and be consistent with the province’s commitment to a 10 percent reduction below 1990 GHG levels by 2020.

Action steps:
• Increase funding for sustainable transportation
• Identify funding targets and schedule
• Identify funding sources
• Create municipal allocation guidelines

2. Identify a provincial department to be the steward of sustainable transportation

Currently no provincial department has the mandate to deliver public infrastructure and services for sustainable transportation, though nine departments have responsibilities related to transportation, including Transportation and Infrastructure Renewal, Service Nova Scotia and Municipal Relations, Energy/Conserve Nova Scotia, Health Promotion and Protection, Community Services, Education, Environment, Economic Development and Tourism, Culture and Heritage.

The lack of coordinated services often means the policies of one department are at odds with another. Provincial leadership is required to ensure the province maintains best practices in the de-
velopment, implementation and integration of sustainable transportation infrastructure and services. The Ecology Action Centre recommends that the province identify a department to be the steward of sustainable transportation and develop a comprehensive sustainable transportation strategy. Possible lead departments are Transportation and Infrastructure Renewal, Conserve Nova Scotia and Service Nova Scotia and Municipal Relations.

**Action steps:**
- Appoint one department to be the steward of sustainable transportation
- Designate at least one full-time sustainable transportation employee
- Convene an interdepartmental sustainable transportation committee
- Convene a non-governmental transportation stakeholders committee
- Conduct a policy review

3. **Establish indicators for annually measuring progress toward sustainable transportation**
   The current indicator for sustainable transportation in Nova Scotia is commuting data from the Statistics Canada Census. In 2006, the majority of Nova Scotians drove alone to work (73 percent), while others carpooled (11 percent), used transit (6 percent), and walked or cycled (9 percent). In 2007, Genuine Progress Index (GPI) Atlantic identified a series of economic, social and environmental indicators with which to measure the sustainability of Nova Scotia’s transportation system. The indicators show a movement away from sustainability, with 13 of 20 measures declining.

Presently, measurement of sustainable transportation progress in Nova Scotia is hindered by a lack of complete, reliable data. Neither Statistics Canada nor Transport Canada collect the information necessary to make annual comparisons. The Ecology Action Centre recommends that the province adopt and monitor a suite of environmental, social and economic indicators to measure the sustainability of Nova Scotia’s transportation system and assess targets and related policies every five years; and annually present all results to the public.

**Action steps:**
- Adopt and monitor a suite of environmental, social and economic indicators
- Establish indicator targets
- Support data collection

4. **Create a sustainable transportation network**
   Currently, Nova Scotia has many transportation assets, including King’s Transit, Cape Breton Transit and Metro Transit, Acadian Lines, private van shuttles, Via Rail and developed sections of the Trans Canada Trail. Despite these assets, much of the province is not served by mass transit or active transportation routes of any type, including large portions of Yarmouth, Digby, Guysborough, rural Halifax, Victoria and Inverness counties.

   The Ecology Action Centre recommends that the province develop and implement a vision for a sustainable transportation network within and between rural and urban communities. The network must enable the use of a mix of sustainable transpor-
Nova Scotia’s urban density diminished by 36% between 1971 and 1996 – one of the sharpest declines in the country.  

- Walking, cycling, skateboarding, rollerblading, scootering, transit, ferry, community vans, carpooling, car-sharing and interurban bus and rail; facilitate intermodal connections; provide infrastructure and services that are integrated, safe, affordable, comfortable, attractive and convenient; provide increased accessibility and independence for all users, especially persons with physical challenges, seniors, children and youth; and encourage compact, multi-use development.

**Action steps:**
- Create a provincial bicycling network
- Complete provincial trail network
- Develop transit, rail and ferry network that connects various cities
- Invest in public transit, including dial-a-ride
- Provide incentives to municipalities for the development of active transportation
- Support pooling of existing public transportation services
- Facilitate integration of light freight and passenger transportation services
- Identify and change policies that inhibit the development and use of sustainable transportation.
- Remove insurance barriers to all sustainable public transport operators
- Identify and promote synergy between sustainable transportation and rural economic development

5. **Integrate land-use planning into provincial policy to achieve transportation energy efficiency**

Urban density is a measure of how compact a community is. Generally, the more compact a community is, the more its citizens can live within walking distance of work and school and take advantage of transit services, the more working farmland and habitat that can be protected from urban sprawl and the more efficient the use of infrastructure such as roads and sewers. Unfortunately, between 1971 and 1996, urban population density in Nova Scotia decreased by 36 percent. This is a rate 13 percent higher than the Canadian average.
Smart growth is an approach to community planning developed in the 1990s in reaction to urban sprawl. Applied in combination, smart growth principles, such as directing development toward existing communities and mixing land uses, result in communities with smaller environmental footprints, healthier citizens, and a vibrant local economy.12

The Ecology Action Centre recommends that the province collaborate with municipalities to identify, develop and maintain policies and practices that will achieve smart growth in Nova Scotia.

**Action steps:**
- Strengthen the current land use planning and transportation content of the Municipal Government Act
- Support municipalities in the incorporation of sustainable transportation best practices in their Integrated Community Sustainability Plans
- Conduct a study to identify and prioritize financial (dis)incentives to promote smart growth at the municipal level
- Develop a farmland policy that prioritizes the use of farmland for food production over the production of plant matter for biofuels
- Legislate province-wide, purpose-specific, mandatory development charges

6. **Increase public awareness about sustainable transportation**
A number of education and outreach programs related to sustainable transportation exist in Nova Scotia, for example, Active and Safe Routes to School, Drive Wiser and the Select Nova Scotia Campaign. Still needed is education and publicity about transportation services and infrastructure that exist and social marketing campaigns to encourage the use of active transportation, transit, rail and carpooling. The Ecology Action Centre recommends the creation and promotion of a centralized transportation website, which would include a province-wide ridematching service and information on all transportation services, routes, schedules and fares in Nova Scotia – public transit, intercity bus, rail and trail; the development and implementation of a share the road campaign to encourage increasing acceptance and use of active transportation; and the designation of a government employee to facilitate networking and capacity-building between various transportation organizations in the province.

**Action steps:**
- Create and promote a centralized transportation website
- Create and promote a province-wide carpool matching service
- Develop and implement a province-wide share the road campaign
- Designate a government employee to facilitate capacity-building
- Assist school boards to develop active transportation policies
- Support existing education programs

7. **Implement financial incentives to encourage sustainable transportation**
Many people are heavily reliant on the use of personal vehicles for transportation, even when other options exist. Incentives are one way to encourage people to use sustainable modes of transportation. Genuine Progress Index Atlantic’s 2007 analysis of the full
costs of transportation in Nova Scotia identified that,

...existing transportation market distortions result in economically excessive motor vehicle travel, which undermines sustainable development objectives. In a more optimal market, the evidence indicates that people would drive less, rely more on alternative transport modes, place a higher value on locating in multi-modal communities, and be better off overall as a result.13

The Ecology Action Centre recommends that the provincial government undertake a study to identify barriers to using sustainable transportation and assess the effectiveness of potential tax incentives, such as a provincial transit tax credit, a provincial vehicle scrappage program, tax free active transportation equipment, hybrid rebates, location efficient mortgages and telecommuting equipment tax credits.

Action steps:
• Identify and assess the effectiveness of potential tax incentives
• Work with the insurance sector to offer the option of pay as you drive insurance in Nova Scotia.
• Introduce a vehicle feebate program,
• Explore potential for location efficient mortgages

8. Implement policy and education programs to improve vehicle efficiency
Passenger vehicles account for two-thirds of the energy used by road vehicles in Nova Scotia. Though the efficiency of individual vehicles has improved, this has been offset by the greater number of SUVs, minivans and trucks on the road, an increase in the total number of vehicles on the road and a greater number of kilometres travelled. Therefore, the Ecology Action Centre recommends the following action steps.

Action steps:
• Adopt California-like vehicle emissions standards by 2010
• Urge the federal government to adopt a Canadian vehicle fuel efficiency regulation that, at minimum, meets the California standard.
• Lower and enforce speed limits
• Support fuel efficient taxi fleets.
To facilitate increased provincial investment in sustainable transportation, the Ecology Action Centre is undertaking a two-phase approach. The first phase culminated in the production of this strategy. The second phase will involve communicating and implementing the strategy. In 2008/2009, the Ecology Action Centre will:

- Write a series of articles, aimed at daily and weekly newspapers throughout the province, to inform the public about specific recommendations in the *Green Mobility Strategy*
- Distribute the strategy to all municipalities and provincial cabinet members
- Present the strategy to provincial decision-makers and key stakeholder groups
- Implement specific recommendations in the *Green Mobility Strategy*, such as support municipalities in the incorporation of sustainable transportation best practices in their Integrated Community Sustainability Plans
- Conduct further research on specific topics, such as the land use planning and transportation content of Municipal Government Acts in other provinces.

Society is now at a turning point. We can choose to continue on the road of oil dependency, recognizing that this road will have devastating effects on the environment and on human health. Or we can choose to shift our habits away from automobile dependency towards a more sustainable future. The Government of Nova Scotia has chosen the latter option. Passed in 2007, the *Environmental Goals and Sustainable Prosperity Act* set an exciting precedent for Nova Scotia. In this Act, Nova Scotia committed to reducing greenhouse gas emissions to at least ten per cent below 1990 levels by the year 2020. Aiming to be “one of the cleanest and most sustainable environments in the world by 2020”14, Nova Scotia’s government has laid a challenge before itself and its citizens.

The *Green Mobility Strategy* is a tool to help decision-makers reach the province’s goal. Rather than investing solely in new highways, the *Green Mobility Strategy* directs decision-makers to funding more sustainable means of moving people from place to place. Active transportation, carpooling and public transit all have roles to play, as well as encouraging people to live in higher density communities, where centres of employment, education and shopping are within walking distance of home. With the *Green Mobility Strategy*, the Ecology Action Centre aims to facilitate increased provincial commitment to sustainable transportation.
Endnotes

2 Richmond County Literacy Network. 2004. Barriers to Employment in Richmond County.
5 Transport 2000 Atlantic
11 Ibid.

Approximately 30% of Nova Scotian’s do not drive, including youth, seniors, individuals with low incomes and individuals with physical and mental challenges.